

Listing of Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

1. (Canceled)
2. (Canceled)
3. (Canceled)
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22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28 (Currently amended) A system for monitoring position of a reticle's top surface, the system comprising:

a reticle stage having a reticle holding well for holding the reticle in place;

a reference plane defining the position of the reticle's top surface when the reticle is properly level in the reticle stage, the reference plane having associated therewith an incidence axis and a reference reflection axis;

at least one optical level detector mounted on the reticle stage comprising a set of connecting hardware for adjusting the height of the optical level detector relative to the reticle's top surface wherein the at least one optical level detector is positioned over the reticle holding well, each of the at least one optical level detector comprising:

a light source for projecting an incidence beam of light toward the reticle's top surface along the incidence axis, wherein when the reticle's top surface is in same position as the reference plane, the incidence beam of light is reflected by the reticle's top surface into a reflected beam that is coincident with the reference reflection axis; and

a reflector for deflecting the reflected beam toward a light detector along the light

detector's viewing axis and fully registers with the light detector, causing the light detector to generate a first signal value and when the planar surface's position is deviated from the reference plane, the reflected beam does not fully register with the light detector, causing the light detector to generate a second output signal value;

wherein the at least one optical level detector is used to monitor position of the reticle's top surface in relation to the reference plane by monitoring the output signal value of the optical level detector's light detector.

29. (Original) The system of claim 28, wherein the first signal value is a peak output signal of the light detector.

30. (Original) The system of claim 28, wherein the second determined signal value is an output signal of the light detector that is less than the peak output signal value.

31. (Original) The system of claim 28, wherein the at least one optical level detector comprises four optical level detectors, one optical level detector mounted near each of the four corners of the reticle holding well.

32. (Canceled)

33. (Currently amended) The system of claim ~~[[32]]~~ 28, wherein the set of connecting hardware comprises a vertically actuating guide bearing.

34. (Original) The system of claim 33, wherein the vertically actuating guide bearing comprises a slide having wormgear teeth, a bed, and a worm situated in the bed and having a thumb screw portion for turning the worm.

35. (Currently amended) A method of monitoring the position of a reticle's top surface in a photolithography stepper tool in relation to a reference plane, the reference plane having associated therewith an incidence axis and a reference reflection axis, the method comprising:

inserting a reticle in a reticle holding well in the photolithography stepper tool's reticle stage;

monitoring at least one optical level detector's output signal, the optical level detector being that is mounted on the reticle stage comprising a set of connecting hardware for adjusting the height of the optical level detector relative to the reticle's top surface, wherein the optical level detector comprising:

a light source for projecting an incidence beam of light along the light source's projection axis and on to the reticle's top surface along the incidence axis; and

a light detector whose viewing axis is coincident with the reference reflection axis, wherein when the reticle's top surface is in same position as the reference plane, the incidence beam of light is reflected by the reticle's top surface into a reflected beam that is coincident with the reference reflection axis and fully registers with the light detector, causing the light detector to generate a first signal value and when the reticle's top surface's position is

deviated from the reference plane, the reflected beam does not fully register with the light detector, causing the light detector to generate a second signal value.

36. (New) The method of claim 35, wherein the set of connecting hardware comprises a vertically actuating guide bearing.

37. (New) The method of claim 36, wherein the vertically actuating guide bearing comprises a slide having wormgear teeth, a bed, and a worm situated in the bed and having a thumb screw portion for turning the worm.